

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

FIGURE 1

90	ACCCGCGCT	CAGCTTCCAT	CCCTGCGCGG	TCAACAAGTG	CGCGCTGCG	L A Q R G	CGCGCGCGCA	GACCGCGAGG	CGACCGCGAG
						BAG-1L			
180	CGCGTGGTT	CCCGCTGCG	CGCGCTTCCG	CCAGCGCGCG	AGCGCGCGCA	GTCGCGCGCC	CCCGCGCGAG	GTCGCGCGCC	TCCTCTCTCG
	R L G S	R L R	A L R	P G R E	P R Q	S E P	P A Q R	G P P	P S R
270	CGTCCACTG	CCCGAGTAC	TCGCGCGCG	CATGACCGAC	CCAGCGCGCG	CGCGCGCGCG	CGCGCTCGCA	CGCGCGCGAT	GAGAGAGAA
	R P P A	R S T	A S G	H D R P	T R G	A A A	G A R R	P R M	K K K
									BAG-1M
360	ACCGCGCGCG	CGTCCAGCG	GACCGAGCG	TTGACCGCGA	CGCGCGCGAT	GACCGCGCGT	GAGAGAGCGA	CGTCCAGTCA	AGAGCGCGCG
	T R R R	S T R	S E E	L T R S	E E L	T L S	E E A T	W S E	E A T
450	CGAGTGCAG	AGCGCGCGCA	CGCGCGAGCG	ATGACCGCGA	CGCGCGCGAT	GACCGCGCGC	GAGAGTCA	CGCGCGCGCA	CGAGTGCAG
	Q S E E	A T Q	G E E	M N R S	Q E V	T R D	E E S T	R S E	E V T
540	AGCGTGCAG	TCGCGCGCG	TCGCGTCAAC	GTCAGTCA	CCAGCGCGAA	TCAGAGCGAC	GACCTTCAG	TTACCTCGCA	CGAGCGCGCG
	R E E M	A A A	G L T	V T V T	H S N	E K H	D L H V	T S Q	Q G S
630	AGTACCGAG	TTGTCGAGA	CGTCCCGCG	GTGTCGAG	AGTTCATCG	CGTCCCGCG	TCCTTCGAG	AACTCATTT	TTAGCGCGAA
	S E P V	V Q D	L A Q	V V E E	V I G	V P Q	S F Q K	L I F	K G K
720	TCCTTCAGG	AAATCGAAC	ACGCTGCTCA	GCCTTCGAA	TACAGATCG	TTGCGCGCGC	ATGTCATTTG	CGAAAGAGAA	CAGTCCAGAG
	S L K E	M E T	P L S	A L G I	Q D G	C R V	M L I G	K K N	S P Q
810	GAGAGGTG	AACTAAGAA	GTTCGAACAT	TTGCGAGAT	CTGTCGAGAA	GATGCTGAC	CAGCTCGAG	AGTTCAGTAA	AGAGCTTACT
	E E V E	L K K	L K H	L E K S	V E K	I A D	Q L E E	L N K	E L T
900	GGATCCAGC	AGGTTTCT	CGCCAGGAT	TTGCGAGCTG	AGCTCTCTG	CAAACTTGAT	AGGAGAGTAA	AGCCAGCAT	AGAGAGTTT
	G I Q Q	G F L	P K D	L Q A E	A L C	K L D	R R V K	A T I	E Q F
990	ATGAGATCT	TGAGCGAGAT	TCACACACTG	ATCCCTCCAG	AAATTTTCAA	AGACAGTGA	TTGAAAGCA	AGGCTTGTG	AAAAAGGTT
	M K I L	E E I	D T L	I L P E	N F K	D S R	L K R K	G L V	K K V
1080	CAGGATATCC	TAGCGCGTG	TCACACAGTG	GAGCGAGCA	TCCTCCAGCA	GACTGAGCG	CTGAGTCA	CAAACTTTC	CCTGCGCGAG
	Q A F L	A E C	D T V	E Q N I	C Q E	T E R	L Q S T	N F A	L A E
1170	TCAGGTGAG	CAGAAAGG	CTGTCTCTCC	CTGAGATG	CGCGCGCGCG	CTCTCGCGTC	TCTGATCG	AAATTCCTG	ATTCTTCAG
1260	CGCTCTCTCG	CGCACTCGC	CATTTCGCA	TTTCTCTACT	CTCACACTCG	TTCTCAATCA	AAATAGTGT	CTTGTGANT	TCAGTAAAGC
1291	TCCTATCTG	TTTTTCAGA	AAAAAANA	A					

FIGURE 2A

90
GCAGCCGCGG TGTCGCGAAG TCCTCCCGGG TTGCCCCCGG GCGGTCAGAG GAGGGCGGG GCGCCGCTTG GTGACGGCGA CCCTQCAGCC
CARAGAGCGC TCCACTCGCT GCGGCGGAG GCGGCGTAC CTCTTGCTA CCGCGCGTCG GAGGCTTAGA TGGCTCAGGC GAGGATCAAC
M R Q A K I N
180
GCTAAGCCG ACCAGGGGGG CTTCTGCGG TCCTCCTCCA TGGCTGACCG CTCAGCGCGC CTGCTGGAGA GCCTGGACCA GCTGGAGGCTC
A K A N E G R F C R S S S M A D R S S R L L E S L D Q L E L
270
AGGTTGAGG CTTTGAGAGA AGCAGCAACT GCTGTTGAGC AGAGGAGAGA ATCCTTCTG GAAATGATCC ACAGTATCCA AAATAGCCAG
R U E A L R E A A T A U E Q E K E I L L E M I H S I Q N S Q
360
GACATGAGGC AGATCAGTGA CGGAGAGAGA GAGGATTTAA ATCTGACTGC AAACCGTTTG ATGGGAGAGA CTCTCAGCGT TGAAGTGTCA
D M R Q I S D G E R E E L N L T A N R L M G R T L T U E U S
450
GTAGAACAA TTAGAACCC CCAGCAGCAA GATCCCTTA AGCATGCCAC AAGGATTATT GATGAGGTTG TCAATAGTT TCTGATGAT
U E T I R N P Q Q Q Q E S L K H A T R I I D E U U N K F L D D
540
TTGGGAATG CCAAGAGTCA TTTATGTCG CTCTACAGTG CATGTTTATC TGAGGTGCCA CATGGGCCAG TTGATCAGAA GTTTCATCC
L G N A K S H L M S L Y S A C S S E U P H G P U D Q K F Q S
630
ATAGTATTC GCTGTGCTCT TGAGGATCAG AAGAAATTA AGAGAGATT AGAGACTCTG CTTAGAAATA TTGAARACTC TGACAGGGCC
I U I G C A L E D Q K K I K R R L E T L L R N I E N S D K A
720
ATCAGCTAT TAGAGCATTC TAAGGAGCT GATTCCAAA CTCTGCACAA AATGCTGAA AGCAGATTCA ATTAGTCTTC AAACCTAGA
I K L L E H S K G A G S K T L Q Q N A E S R F N
810

900	GCATTACAC	AATACACAG	GTGTAAAT	QATAAATAC	TATTTAAT	GATACTAGT	TCCTTTAG	GTATACCAC	TTAGTTGACA
990									
1080	CTGATAGTTG	TTTCAGATGA	GGAAATATT	CCATCAAGTA	TCTTCAGTTT	TGTGAATAAC	AAACTAGCA	ATATTTAAT	TATCTATCTA
1170	GAGATTTTTT	AGATTGAATT	CTTGTCTGT	ACTAGGATCT	AGCATATTTT	ACTATTCTGT	GGATGAATAC	ATAGTTTGT	GGGAAAACAA
1179	ACATTCAGCT	AGGGGCAAAA	AGCATGACTG	CTTTTTCCTG	TCTGGCATGG	ATCAGCGCAG	TCACCTTGGG	CATTTAGTTT	ACTAGAAATT
	CTTTACTGG								

FIGURE 3

GGGAGCTCC GATCCACAC CGGGGCGGG GGCACCTCT CTGACTGGA CAGAGTTT CTAGCGGCC AGTTGCTAC TCCTTTATC	90
A E L R I Q P R A A A A K F S G L O Q K F L A G Q L L P P F I	
TCCTCTTCC OCTCTGGCAG CAGAGGAGCT ATTTCAGAC ACTTCACCC CTCTCTGGCC AGTCACCCC GCCTTTTAT TCATAGGT	180
S S F P S G S E E A I S R H F H P S L A T S P P P L I H K G	
GGGGGGGCC GCTTCCCGG ACAGCTGGC GGGGAGAGG GGGCAGGCC GGGGGCGGG CAGAGACTC GGGGGCGGA GCGGGGGCC	270
A R R R L P G H U G G G E G P T A A R R P E T R R P E P A P	
CGACCGGCC CCGAGCGGG CAGACCCCA CCGAGCTGA GGGGCGCAC CACTCGGCC ATGATGCGG TGGGTCCGG CAGCGTGAC	360
R T R A P A G R P Q P S H S R A T H S P M M Q V A S G K G O	
CGGACCTTT TGGGGCGGG ATGGGAGTC AGATCGACC CGAGACCGG CTGGCCCTTC TTCTGGACC ACACAGCGG CACCACTAG	450
R O P L P P G H E I K I O P Q T G H P F F U D H M S R T T T	
TGAGCGACC CGGGCGTGC CTCTGAGGC CCGAGGAGA CTCATCTCT TGCATGCGC CCTTCCCGG AGGGCTCTAG CCGCGCGCT	540
H N O P R U P S E G P K E T P S S A H G P S R E G S R L P P	
GCTAGGAGG GGCACCTGT GTACCCCGG CTCGACCGG GCTACATTC CATCTCTGT CTCATGAGG GCGCTGAGA CCGCGAGGT	630
A R E G H P U Y P Q L R P G Y I P I P U L H E G A E N R Q U	
CACCTTTTC ATGTCTATC CAGCGCTGG ATGAGCGAT TCGAGCTGA GCGGCGAGG GCGGCTCTC AGAGGTCCCA GTCACTCTG	720
H P F H U Y P Q P G N Q R F R T E A R A A R A P Q R S Q S P L	
CGGGGATGC CAGAACCCAC TCAGCCAGT AACAGTGTG GAGGCTGGC AGGGCGGGG GAGGCCAGC CCGAGCTCT CAGCGAGCT	810
R G N P E T T Q P O K Q C G Q V A A A A A A Q P P A S H G P	
GAGCGTCC AGTCTCGAC TGCTCTGAC TGCTATCTC CATCTCTCT GGGAGCGCT CCTTCTCTG GAGGAGCAG CCGGGCAGT	900
E R S Q S P A R S O C S S S S S S A S L P S S G R S S L G S	
CACAGCTCC CGGGGGGTA CATCTCATC CCGGTATAC ACAGCAGAA CGTTACCGG CAGCGAGCC AGCCTCTCT CACAGAGCC	990
H Q L P R G V I S I P U I H E Q M U T A P A A Q P S F H K A	
CAGAGAGGC ACTACCGGC GAGAGGGGT GATACCGA CCGACCGCC TGTGTACAC AAGATCCAG GGGATGACT GAGGCCCGG	1080
Q K T H Y P A Q R G E Y Q T H Q P U Y H K I Q G O D H E P R	
CCCTGCGGG CGGCTCCGC GTTACGTCR TCTGTCCAG GTGATCGAG CCGGGAGGC TCACCGGCA GAGAGCGAC GGCATCCAC	1170
P L R A A S P F R S S U Q G A S S R E G S P A R S S T P L H	
TCCCTCTGC CACTCCGTG GACACCGTG GTGACCGGC CTCAGCGGC CATGACCAT CAGAAATG CACCTGTTT CAGCGCTGA	1260
S P S P I R U H T U V D R P Q Q P M T H A E T A P U S Q P E	
AACACCGG AAGTAAGC AGGCCAGTT GACACGAC TCCTCTCG ACACATCCA ATTCAAGTA TCCGACAGA GTTGATTCT	1350
M K P E S K P G P U G P E L P P G H I P I Q U I R K E U D S	
AACCTGTTT CCGAGAGCC CCGCTCTCC TGTGAGAGG TAGAGTGAA AGTTCCCTT GCTCAGTTC CTGTCTCTC TCCAGGCC	1440
K P U S Q K P P P P S E K U E V K U P P A P U P C P P P S P	
GGCCTTCTG CTGTCCCTC TTCCCGAG AGTGTGCTA CAGAGAGG GCGAGGCC AGACTGCC CTGAGAGC TACCTCCA	1530
G P S A U P S S P K S U A T E E R A A P S T A P A E A T P P	
AACCGGGG AGCCGAGC TCCCGAAA CATCAGAG TGCTGAGT GAGGCGATC CTGAGAGG TGAGGGGCT GAGCAGCT	1620
K P G E A E A P P K H P G V L K U E A I L E K V Q G L E Q A	
GTAGACACT TTGAGGCA GAGACTGAC AAAAGTACC TGATGTCR AAGTATTG AACAGAGC TGCTGGCCT GATTCAGT	1710
V D K F E G K K T O K K Y L M I E E Y L T K E L L A L O S U	
GACCCGAGG GAGAGCGCA TGTGCTCAG GCGAGAGG AGGTGTGAG GAGGTTGAG ACATCTTG AAAACTOR ACAGAGGCC	1800
O P E G R A D U R Q A R R O G V A K U Q T I L E K L E Q K A	
ATTGATGCC CAGGTGAGT CAGGTCTAT GACTCCAG CAGGACCT TGAGCAGT CAGGCTGC AGGCACTAT GAGATGGT	1890
I O V P G Q U Q U Y E L Q P S N L E A D Q P L Q A I H E M G	
GGCTGCGAG CAGACAGGG CAGAAATAT CCGGATG CAGGATCC CACACAGA AACAGAGC CAGAGGCC AACAGAGCC	1980
A U A A O K G K K N A G H A E O P H T E T Q Q P E A T A A A	
ACTTAAAC CAGCAGAT GACAGACCC CCGGTATC CAGAGACCC GTAGCTCTG CCGGTATTA GTGACTCG GAGCGATGT	2070
T S H P S S H T O T P G N P A A P	
GTCTTTAG CATTTAGT GATGATTT CAGACTTT AGTGATTT GTTTTATTA CCGCTTGT ATGATACT TGGTGAGC	2160
AAACTATA AAGGCTAA AAGGATAT ATGCTTTCT TCATATCT TACTTTGA CATTAAGA AGTCTTGT TGTGAGAA	2250
GTTAAGCC GTTCTTGT CTGAGCCT GTACTTTG GACCCCGAC CAGCTTTAG CTGTGTTG CAGCTCTT TTGAGCTCT	2340
GAAGTGAAG CAGATGAG GATGATTA CCGATGAT AATATGAA CATTAAGA AATATGCT ATTTATTTT	2430
TTATCTAT AATTAATA CCGACTTA CAGAGTAA ATGTGCGA GAGCATAG AATATCTA TATGATTA CTTTATCT	2520
AAATTTT	2520

FIGURE 4

90 ACGATATCCT GTAAGACCAA GAATTGCAG GCCAGAGTTT GAATTCTTAT ACAATGGAO COTATGCTCC AACATACCCC CCAAGCCCTG
 180 GGGCAATAC TGCCTCATAC TCAAGGCGCTT ATTATGACC TGGTTATAC CAGACCAGTT ACTCCACAGA AGTTCACAGT ACTTACCCTT
 270 CATCTGGCA CAGCCCACT CCACTCTCTC GTTGGATCTA TCCCCAGCAG GACTGTCAAG ACTGAGCAG CCCCTCTTAA GGGGCAAGTT
 360 CCAGGATATC CGCCTTCACA GACCCTGGA ATGACCCTGC CCATTATCC TTAGGAGAT GGTATCTGA GTGTTCCACA ATCAGGCGCC
 450 ACTGTACGAC CACAGGAAG ATGCTGCTGT TTCTCCTGCT GCTTATGGA TGGGTGCGC TTATCCCTGG CCTTCATCAG CGCCCTCAGC
 540 L Y D H K K D A W A S P Q A Y G M G G R Y P M P S S A P S A
 ACCACCGGC ATCTCTTACA TCACTGAAG TACTTCACCA TGGCTAGCA GTGGCTCTCC CCACTCACCC CCTTCACCCC CAGTCCACCA
 630 P P G N L Y M T E S T S P W P S S G S P Q S P P S P P V Q Q
 GGCACAGAT TCTTCATACC CCTATAGCCA ATCAGATCAA AGCATGACCC GGCACACTT TCCTTGCAGT GTCCATCAGT ACGATCCTC
 720 P K D S S Y P Y S Q S D Q S M N R H N F P C S U H Q Y E S S
 GGGACAGTG AACATGATG ATTCAGATCT TTGCGATTCC CAGTCCAGT ATAGTCTGA GCCTCAGCTG TATGTAATG CCACCAATGA
 810 G T U N N D D S D L L D S Q U Q Y S A E P Q L Y G N A T S D
 CCATCCACAC ATCAGATC AAGTAGCAG TCTTCTGTA GAATGTGTAC CTTGAGATGA AATCTCTCT CCGAGTATTA AAAAATCAT
 900 H P N N Q D Q S S S L P E E C U P S D E S T P P S I K I I
 ACATGTGCTG GAGAGGTCC AGTATCTTGA ACAGAGTGA GAGGATTTG TAGGAAAAA GACAGACAA GCATACTGGC TTCTGAGAGA
 990 H U L E K U Q Y L E Q E U E E F U G K K T D K A Y H L L E E
 AATGCTAACC AAGGACTTT TGAAGTGA TTCAAGTGA ACTGGGGGCC AGGACTCTGT ACGGCAGGCC AGAAGAGAGG CTGTTTGTAA
 1010 M L T K E L L E L D S U E T G G Q D S U A Q A R K E A U C K
 GATTCAGGCC ATATTGAAA
 I Q A I L E

FIGURE 5

90 GAGAAATATAA AATGAACTT CTCARACAC AAACCCCTTC TGAATTGTAC CTGAGCTCCA AARCAATTT GCAGGGTTTA ATTOGACAT
 180 E I K N E L L Q A Q N P S E L Y L S S K T E L Q G L I Q Q L
 TGGATGAGGT AGTNTTGA AAAACCCCT GCATCCGGA AGCAGGAGA AGAGCAGTGA TCGAGGTGCA AACTCTGATC ACATATATG
 270 D E U S X E K N P C I R E A R R A U I E U Q T L I T Y I D
 ACTTGAGGA GGCCTTGAG AARAGAGC TGTTCCTTG TGAGGAGCAC CCATCCCAT AAGCCCTCTG GACGCTCCTT GGAACCTGT
 360 L K E A L E K R K L F A C E E H P S H K A U W N U L G N L S
 CTGAGATCCA GCGAGAGTT CTTTCATTTG ATGAAATCG AACCGATAAG AACTACATCC GCGTGAAGA GCTGCTCACC AAGCAGCTGC
 450 E I Q G E U L S F D Q N R T D K N Y I R L E E L L T K Q L L
 TAGCCCTGA TGCTGTTGAT CCGCAGGAG AAGAGAGTG TAGGCTGCC AGGAAACAG CTGTGAGGCT TCGCAGGAT ATTCTCAGCT
 540 A L D A U D P Q G E E K C K A A R K Q A U A L A Q N I L S Y
 ATCTGACCT GAATCTGAT GAATGGAGT ACTGAATAC CAGAGATCTC ACTTTTGATA CTGTTTGA CTTTATATGT GCTTCTATGT
 630 L D L K S D E W E Y
 ATGAGAGCT TTCAGTTTAT TGATTATAC GTGCATATTT CAGTCTCAGT ATTTATGAT GAGCAATTT CTATTCAGTA TCTGCTGCTT
 689 TTGATGTTGC AAGACAATA TCATTACAGC ACOTTAACCT TTCCATTCGG ATCAAAAA

FIGURE 6A

ATGTCCTTCCGCTCTTCGTTGAAATATTTCACTTTCTTTTCCAGCTTTTCCCCATCTCGACCT
GCTTTGGTTTTT
CGAGAAAACACGTTCCAAATCAGCGACATCTCTCAAATTGAGATCATAGGCTTTTGAAGATTG
CTCAAATTATG
CTTCTCATATTGCATGAGCATTTTGAAGCCCGCGTCATCAACCAAAGCATTTTTCACCCATCA
CAATGATTTTAT CATTCTTTTAAAATT

FIGURE 6B

REED and TAKAYAMA
P-LJ 3737

MKVNVCSSV	QTTIDILEEN	QGEDESILT	TL	GQLRDRIATD	NDVDVETMKL	50
LHRGKFLOGA	DDVSLSTLNF	KENDKIIVMG	GKNALVDDAG	FKMLMQYEKH	100	
NLSNLQKAYD	LNLRDVADLE	RGFLEKPKQV	EMGKKLEKKV	KYFNEEAERH	150	
LETLDGMNII	TETTPENQAK	RNREKRKTLV	NGIQTLNQN	DALLRRLQEY	200	
QSVLNGDIPE					210	

FIGURE 7A

ATGCCAGTCG	TGAACATACC	AATCAAAATA	CTTGGTCAGA	ATCAATCACA	50
TAGTCGAAGT	AACTCCTCGT	CTTCTGTTGA	CAACGATCGA	AATCAACCAC	100
CACAGCAGCC	ACCTCAACCG	CAACCACAAC	AGCAATCTCA	GCAACAATAC	150
CAGCAGGCTC	CAAACGTGAA	TACCAATATG	CATCATTCCA	ACGGATTCTC	200
ACCTAACTTC	CCATCTCGTA	GTCCATTATC	GGACTTTCCC	AGTTTTTCAT	250
CTGGGTTCCC	AAACGATTCT	GAATGGTCTT	CGAATTTCCC	GTCGTTTCCA	300
AATTTCCCAA	GTGGATTCTC	AAATGGAAGT	TCTAATTTCC	CTGATTTTCC	350
AAGATTTCGA	AGAGATGGAG	GACTATCGCC	AAACCCACCG	ATGCAAGGAT	400
ACAGGAGAAG	TCCAACACCA	ACATCAACTC	AATCTCCAAC	TTCTACATTA	450
AGACGCAACT	CTCAGCAGAA	TCAAGCTCCT	CCACAATATT	CTCAGCAACA	500
ACCACAACAA	GCTCAACAAC	GTCAGACAAC	TCCTCCGTCA	ACAAAAGCTT	550
CATCTCGACC	ACCATCTCGT	ACTCGTGAAC	CAAAGGAACC	TGAGGTACCC	600
GAGAGACCAG	CAGTTATTCC	ATTGCCATAT	GAGAAGAAGG	AGAAACCACT	650
GGAGAAGAAA	GGTAGTCGTG	ATTCTGGAAA	GGGTGATGAG	AACCTTGAAG	700
AGAACATTGC	CAAGATCACG	ATCGGAAAGA	ATAATTGCGA	GTTATGTCCG	750
GAACAAGAAA	CGGACGGCGA	CCCATCTCCA	CTAACCTCCC	CAATCACCGA	800
AGGAAAGCCA	AAGAGAGGAA	AGAAACTTCA	ACGTAATCAA	AGTGTTGTTG	850
ATTTCAATGC	CAAGACAATT	GTTACTTTGG	ATAAAATTGA	ATTACAAGTT	900
GAGCAGTTGA	GAAAAAAGC	TGCTGAACTC	GAAATGGAAA	AAGAGCAAAT	950
TCTTCGTTCT	CTAGGAGAAA	TCAGTGTTCA	TAAGTGCATG	TTCAAACCTG	1000
AAGAATGTGA	TCGTGAAGAG	ATTGAAGCAA	TCACTGACCG	ATTGACAAAA	1050
AGAACAAAGA	CAGTTCAAGT	TGTTGTGCGA	ACTCCACGAA	ATGAAGAACA	1100
GAAAAAAGCA	CTGGAAGATG	CAACTTTGAT	GATCGATGAA	GTCGGAGAAA	1150
TGATGCATTG	GAATATTGAA	AAGGCTAAGC	TGTGCCTACA	AACCTACATG	1200
AACGCCTGTT	CGTACGAAGA	AACTGCTGGA	GCCACCTGCC	AAAACCTTCT	1250
GAAGATCATA	ATTCAGTGCG	CTGCTGATGA	TCAGAAACGC	ATCAAGCGTC	1300
GTCTGGAAAA	TCTGATGTCT	CAAATTGAGA	ATGCTGAGAG	AACGAAAGCA	1350
GATTTGATGG	ATGATCAAAG	CGAATAG			1377

FIGURE 7B

MPVVNIPIKI	LGQNQSHSRS	NSSSSVDNDR	NQPPQQPPQP	QPQQQSQQQY	50
QQAPNVNTNM	HHSNGFSPNF	PSRSPIDFP	SFSSGFPNDS	EWSSNFPSFP	100
NFPSGFSNGS	SNFPDFPRFG	RDGGLSPNPP	MQGYRRSPTP	TSTQSPTSTL	150
RRNSQQNQAP	PQYSQQQPQQ	AQQRQTTPPS	TKASSRPPSR	TREPKEPEVP	200
ERPAVIPLPY	EKKEKPLEKK	GSRDSGKGDE	NLEENIAKIT	IGKNNCELCP	250
EQETDGDPSF	LTSPITEGKP	KRGKKLQRNQ	SVVDFNAKTI	VTLDKIELQV	300
EQLRKAAEL	EMEKEQILRS	LGEISVHNCM	FKLEECDREE	IEAITDRLTK	350
RTKTVQVVVE	TPRNEEQKKA	LEDATLMIDE	VGEMMHSNIE	KAKLCLOTYM	400
NACSYEETAG	ATCQNFLKII	IQCAADDQKR	IKRRLENLMS	QIENAERTKA	450
DLMDDQSE					458

FIGURE 8A

ATGTCAGAAA	AGACTAGCAC	AGTTACAATA	CACTATGGAA	ATCAGCGATT	50
TCCGGTAGCA	GTCAATCTAA	ATGAGACGTT	AAGTGAAGTG	ATTGATGATT	100
TACTTGAAAC	GACTGAGATT	TCTGAGAAGA	AAGTCAAGCT	TTTTTACGCT	150
GGCAAGCGTT	TAAAAGACAA	AAAAGCCTCG	TTATCAAAAT	TGGGTTTAAA	200
AAATCATAGT	AAAATTCTAT	GTATAAGACC	ACATAAGCAA	CAACGAGGTT	250
CCAAGGAAAA	AGACACGGTT	GAGCCCGCTC	CGAAAGCGGA	AGCGGAGAAT	300
CCTGTATTTT	CGCGTATTTC	TGGAGAAATA	AAAGCCATCG	ATCAGTATGT	350
TGACAAAGAA	CTTTCCCCCA	TGTACGACAA	TTACGTAAAT	AAACCGTCGA	400
ACGATCCAAA	GCAGAAAAAC	AAACAGAAAC	TAATGATAAG	TGAACTACTT	450
TTACAACAGC	TTTTAAAATT	GGATGGAGTT	GACGTACTGG	GCAGCGAGAA	500
ATTGCGTTTT	GAACGGAAGC	AACTTGTTTC	TAAGATCCAA	AAAATGTTGG	550
ATCACGTTGA	CCAAACAAGC	CAAGAAGTGG	CCGCATAG		588

FIGURE 8B

MSEKTSTVTI	HYGNQRFPA	VNLNETLSEL	IDDLLETTEI	SEKKVKLFYA	50
GKRLKDKKAS	LSKLGLKNHS	KILCIRPHKQ	QRGSKEKDTV	EPAPKAEAEN	100
PVFSRISGEI	KAIDQYVDKE	LSPMYDNYVN	KPSNDPKOKN	KQKLMISELL	150
LQQLLKLDGV	DVLGSEKLRF	ERKQLVSKIQ	KMLDHVDQTS	QEVAA	195

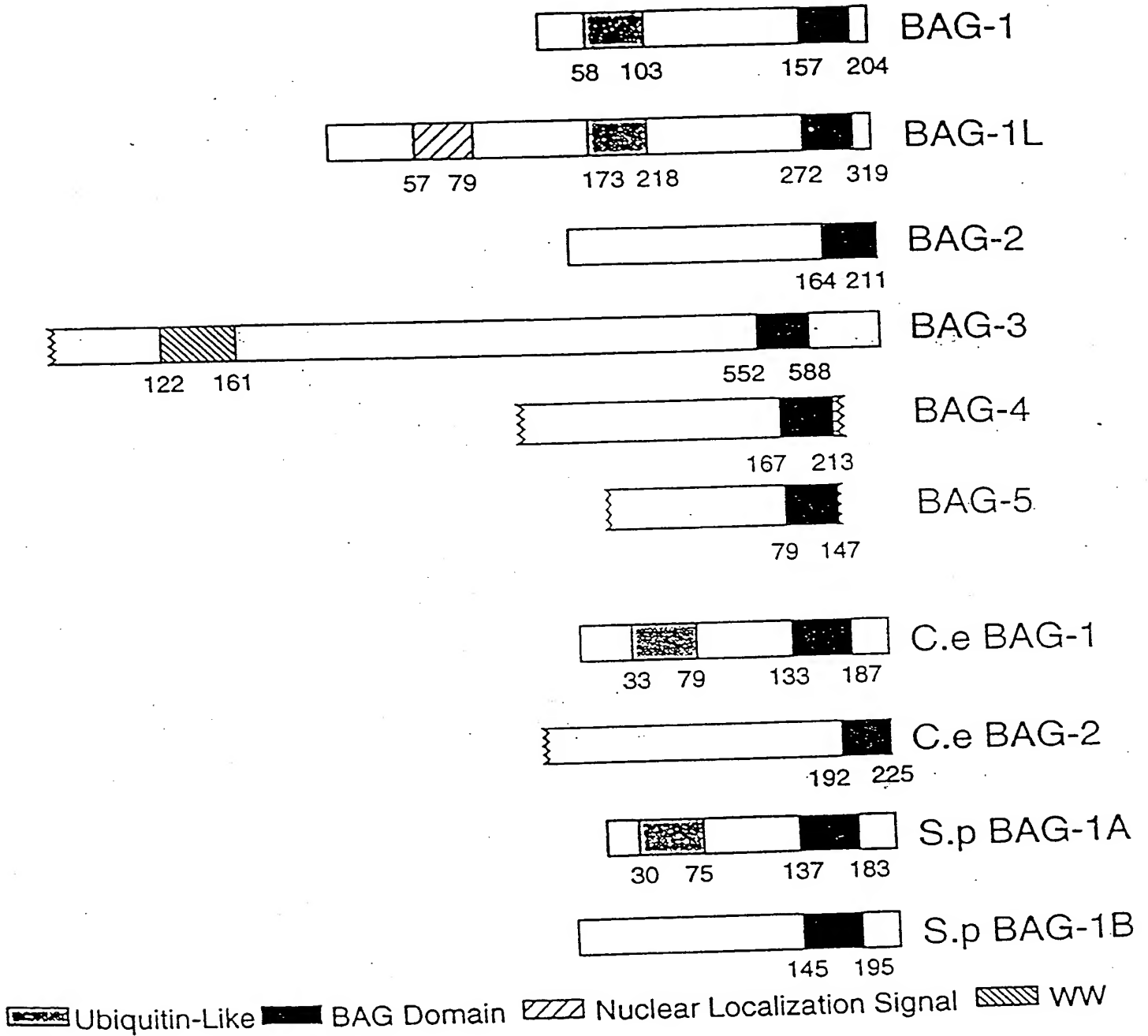
FIGURE 9A

ATGTCTTTTT	TTACCCAGTT	GTGTTCTATG	GATAAAAAAT	ATTGGATCTC	50
TCTAGCTGTA	TTGTCAGTTA	CTGTTTTGAT	TAGCGCATT	TTGAAAAAGA	100
GAGCTACTGA	AACCGAAGAT	ATTGTCGTTG	TTCATTACGA	TGGCGAAAAG	150
TTGAATTTTG	TGTTGCGACA	ACCAAGGCTG	AATATGGTTT	CTTACACTAG	200
TTTTCTTCGT	CGCGTGTGCA	ACGCATTTTC	AGTAATGCC	GACAAAGCGT	250
CTCTCAAGTT	AAACGGGGTG	ACCCTCAAGG	ATGGTTCACT	TTCCGACCAA	300
AATGTGCAAA	ATGGAAGTGA	ATTAGAGCTC	GAATTACCCA	AACTGAGCCC	350
GGCAATGCAA	CAAATTGAAG	CATATATAGA	TGAGCTTCAA	CAGGATCTCG	400
TCCCTAAAAT	TGAAGCCTTC	TGCCAATCGT	CTCCCGCTTC	GGCACAAGAT	450
GTTCAAGATT	TGCATACACG	CCTTAGTGAA	ACATTGTTGG	CTAGGATGAT	500
AAAATTAGAT	GCTGTTAATG	TTGAAGACGA	CCCAGAAGCT	CGTCTTAAAA	550
GAAAAGAAGC	TATTCGTTTA	TCTCAACAAT	ATTTGAGTAA	ACTAGATTCC	600
ACCAAGAATC	AAAACAAATG	A			621

FIGURE 9B

MSFFTQLCSM	DKKYWISLAV	LSVTVLISAL	LKKRATETED	IVVVHYDGEK	50
LNFVLRQPRL	NMVSYSFRL	RVCNAFSVMP	DKASLKLVGV	TLKDGSLSAQ	100
NVQNGSELEL	ELPKLSPAMQ	QIEAYIDELQ	QDLVPKIEAF	CQSSPASAQD	150
VQDLHTRLSE	TLLARMIKLD	AVNVEDDPEA	RLKRKEAIRL	SQQYLSKLDS	200
TKNQNK					206

FIGURE 10A



BEST AVAILABLE COPY

FIGURE 10B

REED and TAKAYAMA
P-LJ 3737

hBAG-1
hBAG-3
hBAG-4
hBAG-5
hBAG-1
C.e BAG-1
S.p BAG-1A
S.p BAG-1B
hBAG-2
C.e BAG-2

157 C K L D R R V R A T I I Q F N I I L E E I T L - E I P E
552 R R T D K R Y L M I E E Y I T I K I L L N L D N V D P E G R A
167 R R T D K R Y W L L E E I T I L L L K L D S V D P E G R A
79 R R T D K R Y I R L E E I T I K O L L L L D N V D P E G R A
124 C I L D R K V R A T I I Q F N I I L E E I T L - E I P E
133 R R T D K R Y F N I E A E I L L L O L L K L D G V D V L G S
137 R R T D K R Y K L M S E L L L O L L K L D G V D V L G S
145 R R T D K R Y K L M S E L L L O L L K L D G V D V L G S
164 L E D D K R Y K R R L I T L L R R L E N S I K A I K I L E
192 A D D K R Y K R R L I T L L R R L E N S I K A I K I L E

FIGURE 11

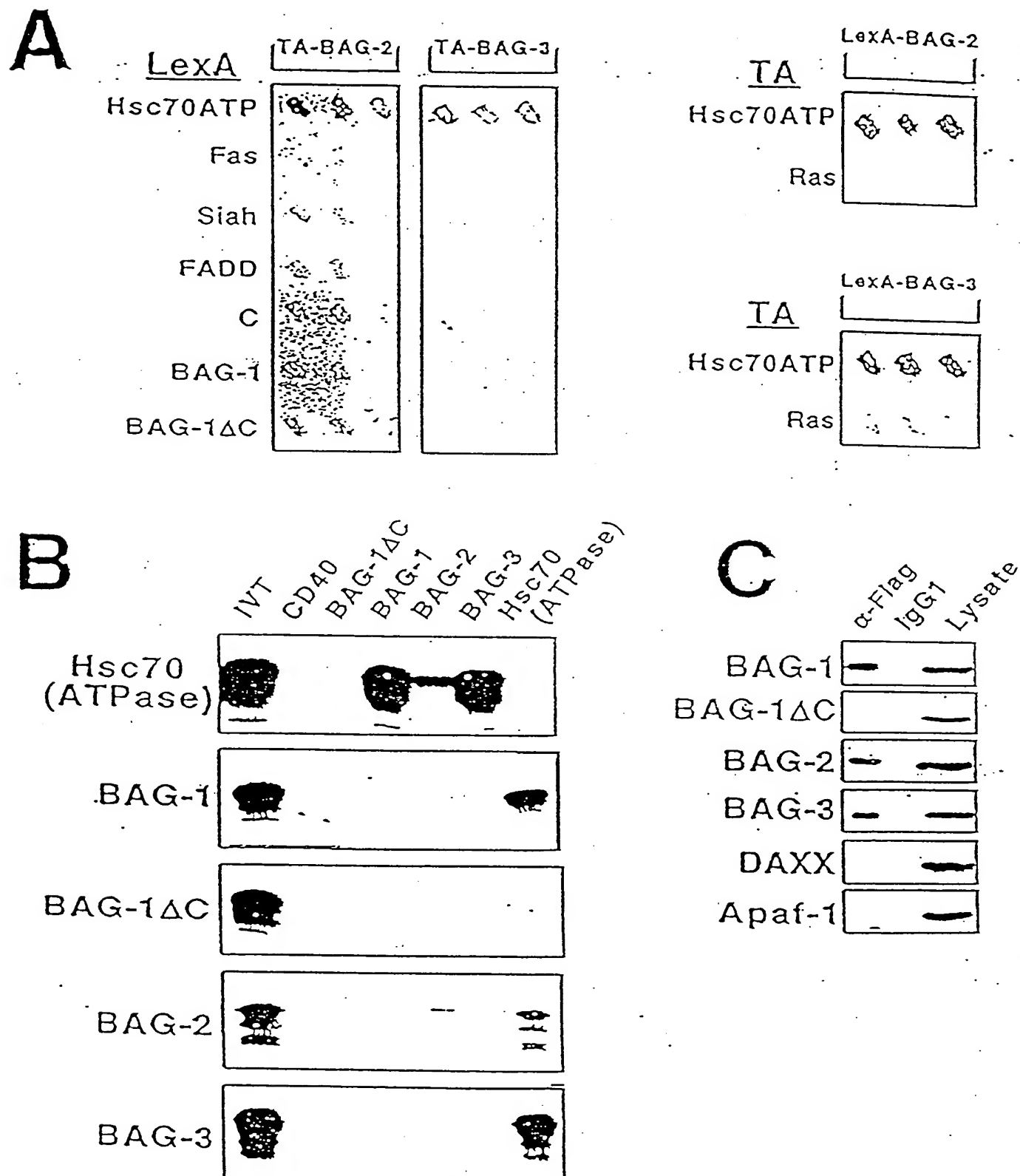
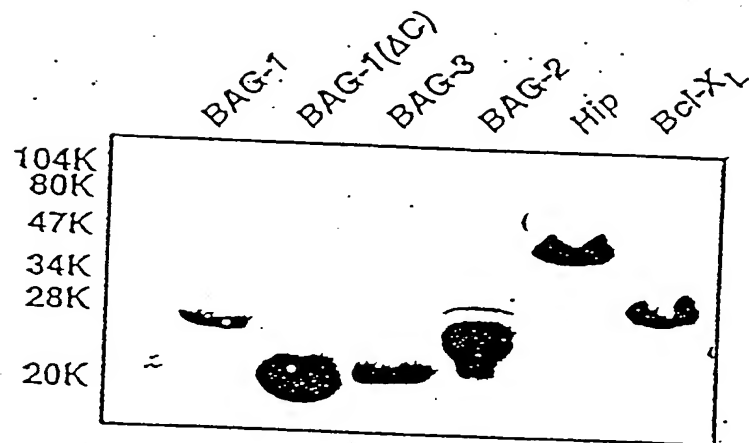


FIGURE 12

REED and TAKAYAMA
P-LJ 3737



BEST AVAILABLE COPY

FIGURE 13

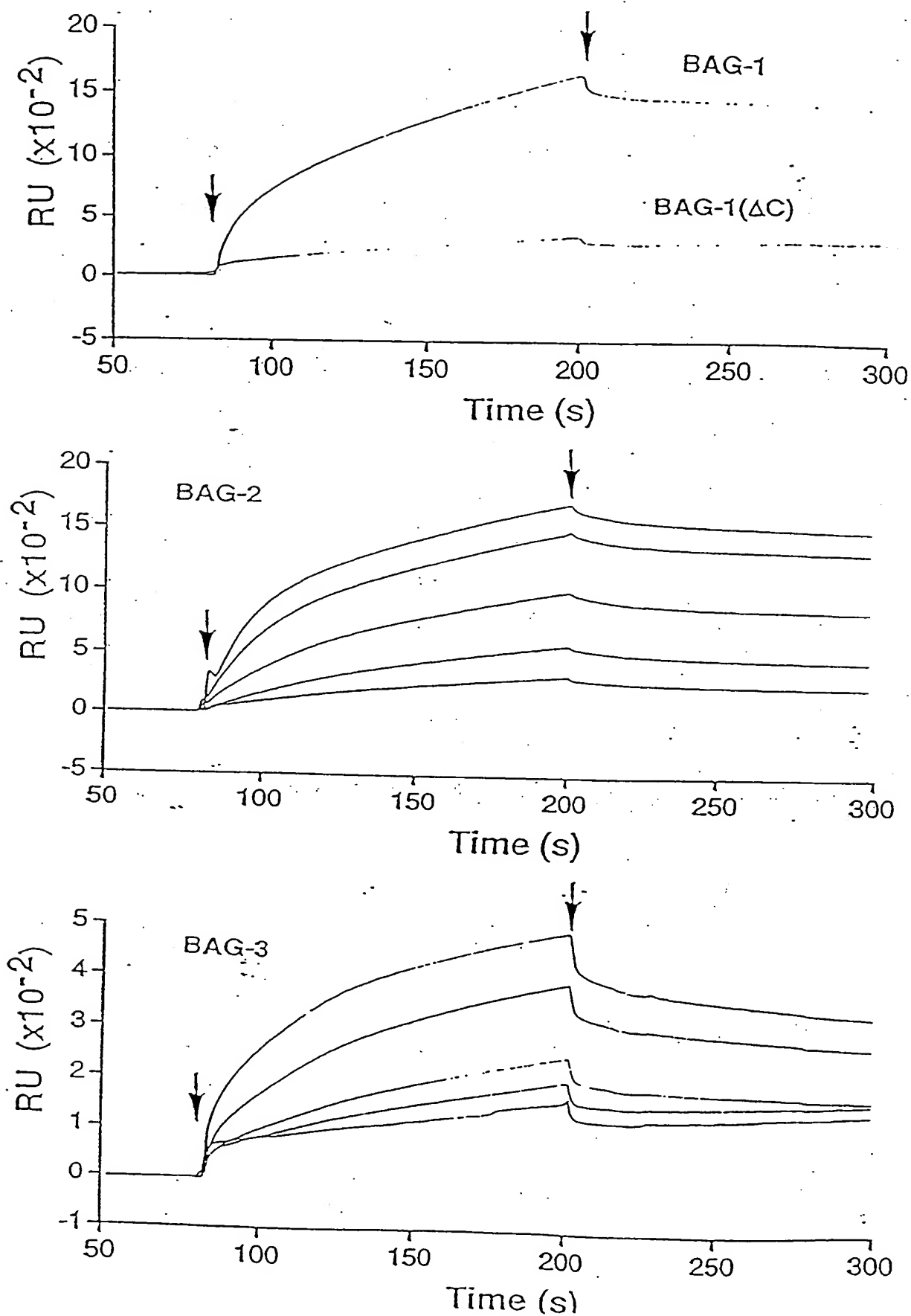


FIGURE 14

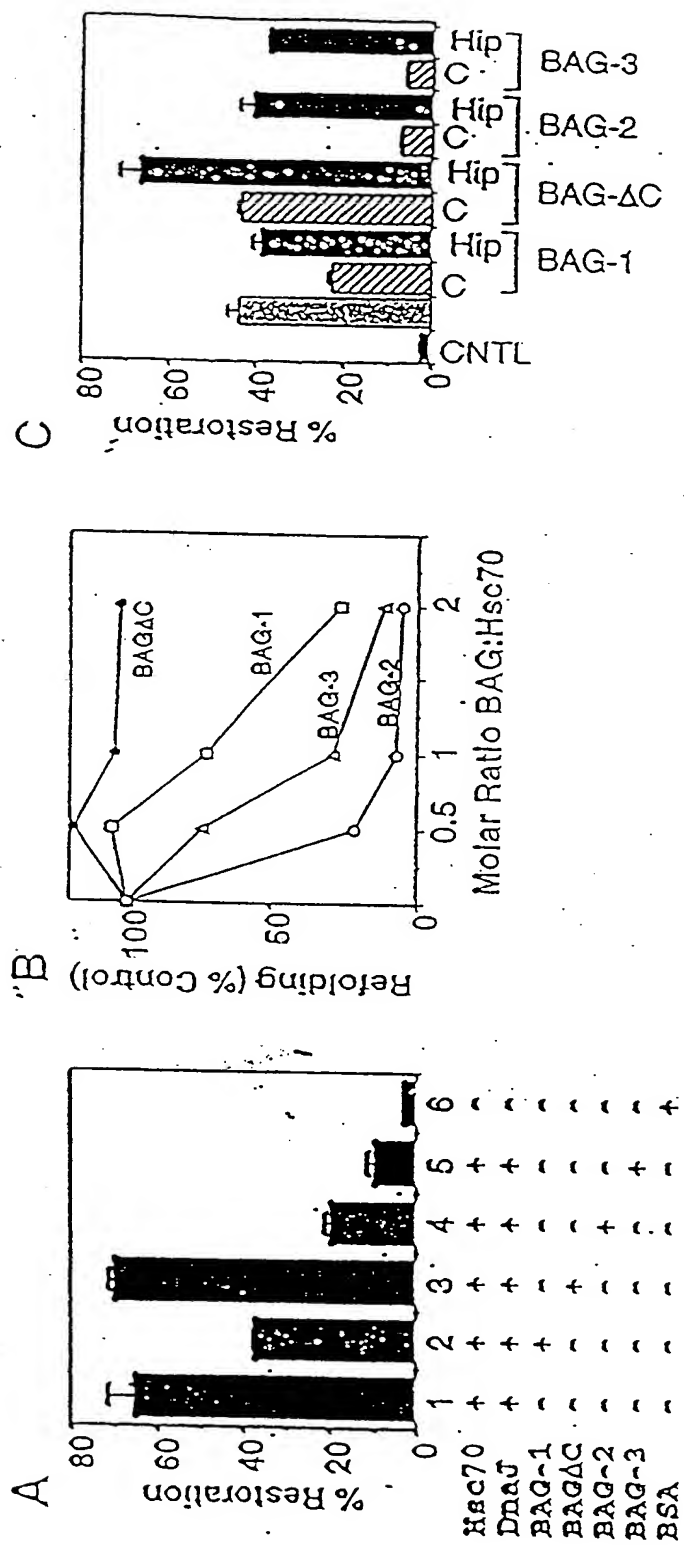


FIGURE 15A

50 GCGGAGCTCC GCATCCAAACC CCGGGCGCGG GCGAACTTCT CTGGAAGTGA
 100 CCAGAAATTT CTAGCCGGCC AGTTGCTACC TCCCTTTATC TCCTCCTTCC
 150 CCTCTGGCAG CGAGGAGGCT ATTTCAGAC ACTTCCACCC CTCTCTGGCC
 200 ACGTACCCCC CGCCTTTAAT TCATAAAGT GCCCGGGGCC GGCCTCCCGG
 250 ACAGTGGC GCGGAGAGG GGOCCAGGC GCGGGGCGG CCAGAGACTC
 300 GCGGCGGA GCGAGGCCC CGACCGCGG CCGCAGCGG CAGACCCCAA
 350 CCCAGCATGA GCGCGCCAC CCACTCGCCC ATGATGCAGG TGGCGTCCGG
 400 CAACGGTGAC CGCGACCCCT TCCCCCGG ATGGGAGATC AAGATCGACC
 450 CGCAGACCGG CTGGCCCTTC TTGCTGAAC ACAACAGCCG CACCACTACG
 500 TGGAAAGACC CCGCGGTGCC CTCTGAGGGC CCGAAGGAGA CTCCATCCTC
 550 TGCCAATGGC CCTTCCCGG AGGGCTCTAG GCTGCCGCT GCTAGGGAAG
 600 GCCACCCTGT GTACCCCCAG CTCGACCCAG GCTACATTCC CATTCCTGTG
 650 CTCCATGAAG GCGCTGAGAA CCGGCAGGTG CACCCCTTCC ATGTCTATCC
 700 CCAGCCTGGG ATGCAGCGAT TCCGAAGTGA GCGGGCAGCA GCGGCTCCTC
 750 AGAGGTCCCA GTCACCTCTG CCGGGCATGC CAGAAACCAC TCAGCCAGAT
 800 AAACAGTGTG GACAGGTGGC AGCGGCGGCG GCAGCCAGC CCCCAGCCTC
 850 CCACGGACCT GAGCGGTCCC AGTCTCCAGC TGCCTCTGAC TGCTCATCCT
 900 CATCCTCCTC GGCCAGCCTG CCTTCCTCCG GCAGGAGCAG CCTGGGCGAGT
 950 CACCAGCTCC CGCGGGGTA CATCTCCATT CCGGTGATAC ACGAGCAGAA
 1000 CGTTACCCGG CCAGCAGCCC AGCCCTCCTT CCACAAAGCC CAGAAAGCGC
 1050 ACTACCCAGC GCAGAGGGGT GAGTACCAGA CCCACCAGCC TGTGTACCAC
 1100 AAGATCCAGG GGGATGACTG GGAGCCCCGG CCCCTGCGGG CGGCATCCCC
 1150 GTTCAGGTCA TCTGTCCAGG GTGCATCGAG CCGGGAGGGC TCACCAGCCA
 1200 GGAGCAGCAC GCCACTCCAC TCCCCCTCGC CCATCCGTGT GCACACCGTG
 1250 GTCGACAGGC CTCAGCAGCC CATGACCCAT CGAGAACTG CACCTGTTTC
 1300 CCAGCCTGAA AACAAACCAG AAAGTAAGCC AGGCCCAGTT GGACCAGAAC
 1350 TCCCTCCTGG ACACATCCCA ATTCAAAGTGA TCCGCAAGA GGTGGATTCT

FIGURE 15A

AAACCTGTTT	1400
AGTTCCTCCCT	1450
CTGTCCCTC	1500
AGCACTGCC	1550
TCCCCAAA	1600
TGCAGGGGCT	1650
AAAAAGTACC	1700
GGATTCAGTG	1750
ACGGTGTCAG	1800
ATTGATGTCC	1850
TGAAGCAGAT	1900
CAGACAAAGG	1950
ACCCAGCAGC	2000
GACAGACACC	2050
ATCAGACTCG	2100
TTCAGAGACT	2150
ACTTGGGTGG	2200
CTTTTCTTCT	2250
TGAGAAAGTT	2300
CCCCACCACC	2350
TGGAGGGGTA	2400
TATCAGAAAT	2450
AAATACCTG	2500
TCTGTATGTT	2534

FIGURE 15B

MSAATHSPMMQVASNGGDRD PLPPGWEIKI DPQTGWPFV DHNSRTTTWN 50
DPRVSEGPKEITPSSANGPS REGSRLPAPR EGHVPYQLR PGYIPVLH 100
EGAENRQVHP FHVYPQGMQ RFRTEAAAA PQRSQSPLRG MPETTQPDQK 150
CGQVAAAAA QPPASHGPER SQSPAASDCS SSSSSASLPS SGRSSLGSHQ 200
LPRGYISIPV IHEQNVTRPA AQPSTFHKAK THYPAQRGEY QTHQPVYHKI 250
QGDDWEPRPL RAASPFRRSS QGASSREGSP ARSSTPLHSP SPIRVHTVVD 300
RPQQPMTHRE TAPVSQPENK PESKPGVGP ELPPGHIPIQ VIRKEVDSKP 350
VSQKPPPPSE KVEVKVPPAP VPCPPSPGP SAVPSSPKSV ATEERAAPST 400
APAEATPPKP GEAEAPPKHP GVLKVEAILE KVQGLEQAVD NFEGKKTDDK 450
YLMIEEYLTKE LLALDSVDP EGRADVRRQAR RDGVRKVQTI LEKLEQKAI 500
VPGQVQVYEL QPSNLEADQP LQAIMEMGAV AADKGKKNAG NAEDPHTTETQ 550
QPEATAAATS NPSSMTDTPG NPAAP 575

FIGURE 15C

CCGCAGCTTC GGTTCAGAC CCGCGCGCG GCGACTTCT CTGACTTCA GCGAAGCTT CTGCGCGCG AGTTCTTAC TCGTTTATC 90
 TCTCTCTTC CTTCTCGAC CCGCAGCTT ATTTCAGAC ACTTCAGAC CTCTCTGCG AGTTCAAGCG CCGCTTTAT TCTTACGCT 140
 CCGCGCGCG CCGCTTCGCG AGCTTCGCG CCGCGAGCG CCGCGCGCG CCGCGAGCT CCGCGCGCG CCGCGCGCG 270
 CCGCGCGCG CCGCGCGCG CCGCGCGCG CCGCGCGCG CCGCGCGCG CCGCGCGCG CCGCGCGCG CCGCGCGCG 340
 M S A A T E S S M M Q Y A S C K C J
 CCGCGCGCTT TCGCGCGCG AGTCAGACT AGCTAGAC CCGCGCGCG CTGCGCTTC TCTTCAGAC AGCGAGCG CCGCGCTTC 420
 R B I L I I C V I I C I S S Q T C V I I I V S E K S R T T T
 TCGAGAGAC CCGCGCTTC CTCTAGCG CCGCGAGCA CTCTCTCT TCGAGTTC CCGCGCGCG AGCGCTTC CCGCGCGCT 540
 V K I S I V I S I C I E I T I S S A K C I S R I C S R L I I
 CCGCGCGAG CCGCGCTTC CTGCGCGCG CTGCGCGCG CCGCGCTTC CTCTCTCT CTCTCTTC CCGCGAGCA CCGCGAGCT 630
 A R I C E I V T I Q L R I C T I I I I V L E I C A I K I Q V
 CCGCTTTC ATTCTTTC CCGCGCTTC AGTCAGCT TCGAGTTC CCGCGCGCG CCGCGCTTC AGCTTCGCA CTCTCTTC 720
 E I I E V T I Q I C M Q I I R T I A A A A A I Q I S Q S I L
 CCGCGCTTC CAGAGAGAC TCGCGAGCT AGAGTTC CAGAGCTTC CCGCGCGCG CCGCGCGCG CCGCGCTTC CCGCGAGCT 810
 R C M I I T T Q I S C Q C C Q V A A A A A A Q I I A S E C I
 CCGCGCTTC AGTTTCAGC TCTCTTTC TCTCTTCT CTCTCTTC CCGCGCTTC CCGCGCTTC CCGCGAGCG CCGCGAGCT 900
 I R S Q S I A A S S C S S S S S S A S L I S S C I S S L C S
 CCGCGCTTC CCGCGCTTC CTCTCTTC CCGCGCTTC AGAGAGCA CTCTCTTC CCGCGCGCG AGCTTCTTC CCGAGAGCG 970
 E Q L I R C I I S I I V I E I Q K V T I I A A Q I S I E K A
 CAGAGAGCG AGTTTCAGC CCGAGAGCT CAGTTCAGC CCGAGAGCG TCTTCAGC AGCTTCAGC CCGAGAGCT CAGCGCGCG 1040
 Q E T E T I A Q I C I T Q T E Q I V I E K I Q C I I V I I I
 CCGCGCGCG CCGCGCTTC CTCTCTTC TCTTCAGC CTCTTCAGC CCGCGCGCG TCGCGCGCG CAGAGAGCG CCGAGTTC 1170
 I L R A A S I I I S S S V Q C A S S I I C S I A R S S T I L E
 TCGCGCTTC CCGCTTCT CCGCGCTTC CTCTAGCG CTCTAGCG CAGAGAGCT CCGAGAGCT CCGCTTTC CCGAGTTC 1240
 S I S I I R V E T V V S I I Q Q I M T E R I T A I V S Q I I
 AGAGAGCG AGCTTCAGC AGCGAGCT CAGAGAGCG TCGCTTCAGC AGCTTCAGC ATTACTTC TCGAGAGCA CCGAGTTC 1350
 K E I I S E I C I V C I I L I I C E I I I Q V I I E I V S S
 AGAGTTC CCGAGAGCG CCGAGTTC TCTTCAGC TCTTCAGC AGCTTCAGC AGTTTCAGC CCGAGTTC CCGCTTCAGC TCGAGAGCT 1440
 E I V S Q E I I I I S I C V I V E V I I A I V I C I I I S I
 CCGCTTCAGC CTCTCTTC TCGCGAGCG AGTTTCAGC CAGAGAGCG CCGCGCGCG AGCTTCAGC CTCTTCAGC TCTTCAGC 1530
 C I S A V I S S I E S V A T I I R A R I S T A I A I A T I I
 AGAGAGCG AGCGAGCG TCGCGAGCG CTCTTCAGC TCTTCAGCT CAGAGAGCT CCGAGAGCG TCGCGAGCT CCGAGAGCT 1620
 E I C I A I R I I C E I C V I E I I I I E I V C C L I Q A
 CTCTTCAGC TCGAGAGCG CAGAGTTC AGAGTTC TCTTCAGC AGCTTCAGC AGAGAGCG TCGCGAGCT CCGAGTTC 1710
 V S K I I C E E T I E I I M I I I I L T C I I L I A I S I V
 CCGCGAGCG CAGAGAGCG TCTTCAGC CCGAGAGCG AGCTTCAGC CAGAGTTC AGCTTCAGC AGCTTCAGC AGAGAGCT AGAGAGCG 1800
 S I I C R A S V R Q A I I S C V R C V Q T I I E C L I E K A
 ATTCTTCAGC AGCTTCAGC CCGCTTCAGC AGCTTCAGC CCGAGAGCT TCGAGAGCT CCGAGTTC AGAGAGCT AGAGAGCT 1890
 I S V I C Q V C V I I L Q I S K L I A S Q I L Q A I M E M C
 CCGCTTCAGC CAGAGAGCG AGAGAGCT CCGAGTTC CAGAGTTC CCGAGAGCG AGAGAGCG AGAGAGCG AGAGAGCG 1980
 A V A A S C C E K A C K A I S S E T I T Q Q I I A T A A A
 AGTTCAGC CCGAGAGCT CAGAGAGCG CCGCTTCAGC CCGAGAGCG CTCTCTTC CCGTTCAGC AGAGAGCT CAGAGTTC 2070
 T S K I S S M T S T I C K I A R I
 CTCTTCAGC AGTTTCAGC TCGAGAGCT TCTTCAGCT TCTTCAGCT TCTTCAGCT TCTTCAGCT CTCTTCAGC AGTTTCAGC 2160
 AGAGAGCG CAGTTCAGC CCGAGAGCG AGAGTTC CTCTCTTC AGTTTCAGC TCTTCAGC TCTTCAGCT CCGAGAGCT 2250
 TCGAGAGCT AGAGAGCT CTCTTCAGC AGAGTTC AGTTTCAGC CCGAGAGCG TCTTCAGCT CCGTTCAGC TCTTCAGCT 2340
 AGCTTCAGC TCGAGAGCT CAGAGAGCT CAGTTCAGC TCGAGAGCT AGAGAGCT AGAGAGCT AGAGAGCT AGAGAGCT 2430
 AGTTTCAGC TCTTCAGCT AGAGAGCT AGTTTCAGC TCGAGAGCT AGAGAGCT AGAGAGCT AGAGAGCT AGAGAGCT 2520
 AGTTTCAGCT

FIGURE 16A

50 CCGTGGAGC GGGGCGGGAA GCGCTTCAGG GCAGCGGATC CCATGTGCGC
 100 CCTGAGGCG TCGGGCTACG GCCCAGTGA CGGTCCGTCC TACGGCCGCT
 150 ACTACGGGC TGGGGGTGA GATGTGCGG TACACCCACC TCCACCCCTTA
 200 TATCCTCTTC GCGCTGAACC TCCCAGCCT CCCATTTCTT GCGGGGTGCG
 250 CCGGGCGGC CCGGCGGAGA CCACTGGCT GGGAGAAGGC GGAGAGGCG
 300 ATGGCTACTA TCCCTCGGA GCGCCTGGC CAGAGCCTGG TCGAGCCGGA
 350 GGAAGCCACC AGGAGCAGCC ACCATATCCT AGCTACAATT CTAACATATTG
 400 GAATTCTACT GCGAGATCTA GGGCTCCTTA CCCAAGTACA TATCCTGTAA
 450 GACCAGAATT GCAAGGCCAG AGTTTGAATT CTTATACAAA TGGAGCGTAT
 500 GGTCCAACAT ACCCCCCAGG CCCTGGGGCA AATACTGCCT CATACTCAGG
 550 GGCTTATTAT GCACCTGGTT ATACTCAGAC CAGTTACTCC ACAGAAGTTC
 600 CAAGTACTTA CCGTTTCATCT GGCAACAGCC CAACTCCAGT CTCGCTTGG
 650 ATCTATCCCC AGCAGGACTG TCAGACTGAA GCACCCCCCTC TTAGGGGGCA
 700 GGTCCAGGA TATCCGCCCT CACAGAACCC TGAATGACC CTGCCCCATT
 750 ATCCTTATGG AGATGGTAAT CGTAGTGTT CACAATCAGG ACCGACTGTA
 800 CGACCACAAG AAGATGCGTG GGCTTCTCCT GGTGCTTATG GAATGGGTGG
 850 CCGTTATCCC TGGCCTTCAT CAGCGCCCTC AGCACCAACC GGCAATCTCT
 900 ACATGACTGA AAGTACTTCA CCATGGCCTA GCAGTGCGTC TCCCCAGTCA
 950 CCCCCTTCAC CCCCAGTCCA GCAGCCCCAAG GATTCTTCAT ACCCCTATAG
 1000 CCAATCAGAT CAAAGCATGA ACCGGCACAA CTTTCCTTGC AGTGTCCTATC
 1050 AGTACGAATC CTCGGGGACA GTGATCAATG AAGATTGAGA TCTTTTGGAT
 1100 TCCCAAGTCC AGTATAGTGC TGAGCCTCAG CTGTATGGTA ATGCCACCCAG
 1150 TGACCATCCC AACAAATCAAG ATCAAAGTAG CAGTCTTCTT GAAGAAATGTG
 1200 TACCTTCAGA TGAAGTACT CCTCCGAGTA TTAATAAAT CATACTGTG
 1250 CTGGAGAAGG TCCAGTATCT TGAACAAGAA GTAGAAGAAT TTGTAGGAAA
 1300 AAAGACAGAC AAAGCATACT GGCTTCTGGA AGAAATGCTA ACCAAGGAAC

FIGURE 16A

TTTTGGAAC TGGATTCAGTT GAAACTGGGG GCCAGGACTC TGTACGGCAG 1350
GCCAGAAAAG AGGCTGTTTG TAAGATTCAG GCCATACTGG AAAAAATTAGA 1400
AAAAAAAGGA TTATGAAAGG ATTTAGAACA AAGTGGAAGC CTGTTACTAA 1450
CTTGACCAAA GAACACTTGA TTAGGTTAAT TACCCTCTTT TTGAAATGCC 1500
TGTTGATGAC AAGAAGCAAT ACATTCACGC TTTTCCTTTG ATTTTATACT 1550
TGAAAAACTG GCAAAGGAAT GGAAGAATAT TTAGTCATG AAGTTGTTTT 1600
CAGTTTTCAGA CGAATGAATG TAATAGGAAA CTATGGAGTT ACCAATATTG 1650
CCAAGTAGAC TCACTCCTTA AAAAATTTAT GGATATCTAC AAGCTGCTTA 1700
TTACCAGCAG GAGGGAACA CACTTCACAC AACAGGCTTA TCAGAAACCT 1750
ACCAGATGAA ACTGGATATA ATTTGAGACA AACAGGATGT GTTTTTTTAA 1800
ACATCTGGAT ATCTTGTCAC ATTTTGTGAC ATTGTGACTG CTTTCAACAT 1850
ATACTTCATG TGTAAATTATA GCTTAGACTT TAGCCCTTCTT GGACTTCTGT 1900
TTTGTTTTGT TATTTGCAGT TTACAAATAT AGTATTATTC TCTAAAAAA 1950
AAAAAAAAAA AAAAAA 1966

MSALRRSGYGPSYGRYYGPGGDDVPHPPPLYLRLPEPPQPPISWRVRGGGPAETTWLGEAGGGDGYYPSSGAWP
EPGRAGGSHQEQPPYPSYNSNWNSTARSRAPYSTYPVRPELQQSLNSYTNNGAYGPTYPPGPGANTASYSGAYYAPGY
TQTSYSTVPSTYRSSGNSPTPVSRWYPPQQDQQTAPPLRGQVPGYPPSQNPQMTLPHYPYGDGNRSVPQSGPTVRPQE
DAWASPGAYGMGGRYWPSSAPSPGPNLYMTESTSPWPSSGSPQSPPPVQQPKDSSYPYSSQSDQSMNRHNFPCSVHQ
YESSGTVINEDSDLLDSQVQYSAEPQLYGNATSDHPNNQDQSSSLPEECVPSDESTPPSIKKIHHVLEKVQYLEQEVEEF
VGKKTDKAYWLLLEMLTKELLEDSVETGGQDSVRQARKEAVCKIQAILKLEKKGGL

[illegible]

FIGURE 17A

CCCCCCCCCC CCNGAAGACG CCGGAGCGG CTGCTGCAGC 50
 CAGTAGCGG CCTTCACCG GCTGCCCCGC TCAGACCTAG TCGGAGGGG 100
 TCGAGGCAT GCAGCTGGG GCCAGCTCC GGTGCCGCAC CCGTAAAGG 150
 GCTGATCTC CACCTCGCA CCTAGCCAC GGGACGCCAA GACCGCATCC 200
 AATTCAGACT TCTTTTGGTG CTTGTGAAC TGAACACAAC AAAAGTATGG 250
 ATATGGGAAA CCAACATCCT TCTATTAGTA GGCTTCAGGA ATCCAAAAG 300
 GAAGTAAAA GTGTAGAACA GCAAGTTATC GGCTTCAGTG GTCTGTCAGA 350
 TGACAAGAAT TACAAGAAAC TGGAGAGGAT TCTAACAAA CAGCTTTTGG 400
 AAATAGACTC TGATAGACT GAAAGGAAA GAGATATTCA GCAAGCTAGG 450
 AAGCGGGCAG CACAGGAGAC AGAAGTCTT CTCAAAGAGT TGGAGCAGAA 500
 TGCAAAACCAC CCACACCGGA TTGAATACA GAACTTTTT GAGGAAGCCC 550
 AGTCCCTCGT GAGAGAGAAA ATTGTGCCAT TTTATAATGG AGGCAACTGC 600
 GTAAGTGATG AGTTTGAAGA AGGCATCCAA GATATCATTC TGAGGCTGAC 650
 ACATGTTAAA ACTGGAGGAA AAATCTCCTT GCGGAAAGCA AGGTATCACA 700
 CTTTAAACCA AATCTGTGCG GTGCAAGAGA TAATCGAAGA CTGCATGAAA 750
 AAGCAGCCTT CCCTGCCGCT TTCGAGGAT GCACATCCTT CCGTTGCCAA 800
 AATCAACTTC GTGATGTGTG AGGTGAACAA GGCCCGAGGG GTCCTGATTG 850
 CACTTCTGAT GGGTGTGAAC AACAATGAGA CCTGCAGGCA CTTATCCTGT 900
 GTGCTCTCGG GGCTGATCGC TGACCTGGAT GCTCTAGATG TGTGCGGCGG 950
 GACAGAAATC AGAAATTATC GGAGGGAGGT AGTAGAAGAT ATCAACAAAT 1000
 TATTGAAATA TCTGGATTG GAAGAGGAAG CAGACACAAC TAAAGCATTT 1050
 GACCTGAGAC AGAATCATTC CATTTTAAAA ATAGAAAAGG TCCTCAAGAG 1100
 AATGAGAGAA ATAAAAAATG AACTTCTCCA AGCACAAAAC CCTTCTGAAT 1150
 TGTACCTGAG CTCCAAAACA GAATTGCAGG GTTTAATTGG ACAGTTGGAT 1200
 GAGGTAAGTC TTGAAAAAAA CCCCTGCATC CGGGAAGCCA GGAGAAGAGC 1250
 AGTGATCGAG GTGCAAACTC TGATCACATA TATTGACTTG AAGGAGGCC 1300

FIGURE 17A

```

TTGAGAAAG AAGCTGTTT GCTTGTGAGG AGCACCCATC CCATAAAGCC 1350
GTCTGGAACG TCCTTGGAAA CTTGTCTGAG ATCCAGGGAG AAGTTCTTTT 1400
ATTTGATGGA AATCGAACCG ATAAGAACTA CATCCGGCTG GAAGAGCTGC 1450
TCACCAAGCA GCTGCTAGCC CTGGATGCTG TTGATCCGCA GGGAGAAAGAG 1500
AAGTGTAAGG CTGCCAGGAA ACAAGCTGTG AGGCTTGCGC AGAATATTCT 1550
CAGCTATCTC GACCTGAAAT CTGATGAATG GGAGTACTGA AATACCAGAG 1600
ATCTCACTTT TGATACTGTT TTGCACITTC TATGTGCTTC TATGTATAGA 1650
GAGCTTTCAG TTCATTGATT TATACGTGCA TATTTCACTC TCAGTATTTA 1700
TGATTGAAGC AAATTCTATT CAGTATCTGC TGCCTTTTGT GTTGCAAGAC 1750
AAATATCATT ACAGCACGTT AACTTTTCCA TTCGGATCAT TATCTGTATG 1800
ATGTGGTGTG GTTTGTTTGG TTTGTCCCTT TTTTGGCTT TTTAATCAGA 1850
AAACAAATA GAGGCAGCTT TTGTAGATTT TAAATGGTT GTGCAAGCAT 1900
TAAATGCAG GTCCTTTCAGA ATCTAGAACT AGGCATAACC TTACATAATA 1950
CTAGGAAAT TATGAGAAAG GGGAAATTT TGGTTAAATA AGAGTAAAGT 2000
TCAACACAA GCAGTACATG TTCTGTTTCA TTATGCTCGA TAGAAGGCTT 2050
TTTTTCACT TATAAGGCCT GATTGGTCCT ACCCAGCTTA ACGGGGTGGG 2100
GTTTTTTTGT TTGTTTCAGAC AGTCTGTTCT TTTGTAAACA TTTTTAGTTG 2150
GAAAAACAGC ATCTGCATTT TCCCCATCCT CTACGTTTTA GAGAGGAATC 2200
TTGTTTTTGT GTGCAACATA AGAAAATTAT GAAAACTAAT AGCCAAAAAA 2250
CCTTTGAGAT TGCATTAAAG AGAAGGGATA AAGGACCAGC AATAATACCT 2300
TGTAAGTTGC TTTTGTTTGT AAAATCTGAG CTTATAGTTT TCCTTAGTGA 2350
GTAAATTCAT AAGGATGGGA ACATTTAAAT TAAGTTAATG GGCCTTTAAA 2400
AAAAAAAAG GAAACACTCA TACCTGTAGT TGGAGGATGA ATACTGGAGA 2450
CGGGTTACCA ATGTCAGGTT ATACTAAAC TAAATCAGAA AGTCTGAATG 2500
TAGCACATAA TGGTTCTCTT CTGTTGTCCA AGGCTGTAAA ATGGACAGCC 2550
TTGTCACACC TCCCCGGTGC TGTTTTACAA CGTGAGGGTA GACGCTGTCA 2600

```

FIGURE 17A

GTAACCCAGA GGGACCAAGG CTTCTAGGT TTTCTAGGCA GTCAGCTGTT 2650
 AACCACTCAC TTAGTAAATG TCATAACTAC ACCTGCTCCA GGACCAATCA 2700
 GTGAAACCTG CTCGGAATTA AAGGCTTCTT CTGGGTGCTT GCTGAACAAC 2750
 TGAGCTCATG TCATGGGCAT GTGGTGTTT CTCTGTTGCC TGAAGAGGCC 2800
 ATTAAGTCA GTCGTGCGTG AAGCATCTCT CTTCTAAAGG ATGTGTATTT 2850
 CCATAAATGC TTTCTGAGGA TCCGGTACAA AATGATTTCC CAAAGTTCTG 2900
 AAGTGCCCTG AGAACATGTG GGTCGGAGTG TTATAACAGA CTCCTCCCCC 2950
 GGGTCACCTT TTGCCTGGTC ATCCTGTTAG AGTACATCTT TGGAAATCCA 3000
 GGGTAATATT CTCCTTCAGA GATGCTCATT GTGTAACCTT GTGTAGGGAG 3050
 ATAGTCACCT TAAACAGCTC AAAGTAGCTA GCTAAAGGAG TAGCCTTAAA 3100
 TACCTAAAAG ATGACAGAAG CATAGCCCTT AACAAATCTT CAGCTTGCTT 3150
 CTCAGTATT CCCAATCATG AAAATCCCTT GCTATGCTTT TCCTACTAGA 3200
 AATGTTCTAG AATCGCTGA CGGTGGGTC AGAGGGCAGT CCGTATTTAG 3250
 GCGTGAGCT TCCATACCTA CTGCAGGTCC AACTCCTGGC AACCGCGGGC 3300
 TCAAGGCAGG TCATTGGAAT CCACGTTTTG GCCACAGTAG TTGTAGGATT 3350
 GCTTTTCTGT ATCATAAATT TAGAATGCTC TTAAAATCTT GAGGAAGAGT 3400
 TTTTATTTTT TATTTATTTT TGAGATGGAG TCTCTGTTGC CCAGGCTGCA 3450
 GTGCAGTGGT GCCATCTCAG CTCACTGCAA CCTCCACCTC CCAGGTTCAA 3500
 GCGATTCTCC TGCCTCAGCC ACCTGAGTAG CTGGGAGTAC AGGCATGTGG 3550
 CACCATGCCCT GGCTAATTTT TGTATTTTAA ATAGAGTTGA GATTTACCCA 3600
 TGATGGTCAG GCTGGTCTCG AACTCCTGAC CTCGTGATCC GCCCGCCTCG 3650
 GGGCCCCAAA GTGCTGGGAT TAACGGGTGT GAGCCACGGC GCCCAGCCCCA 3700
 GGAAGAGTTT TTAAATTAGA GCTCTGTTTA ATTATACCAC TGGGAAATCA 3750
 TGGTTACGCT TCAGGCATAT TCTTCCCCAG AGTACTACTT ACATTTTAAA 3800
 TTTTCATTTTG TAAAGTTAAA TGTCAGCATT CCCTTTAAAA GTGTCCATTG 3850
 TTCTTTGAAA GTAGACGTTT CAGTCAATCT TTTCAAAACA GTGTTTGTGT 3900

FIGURE 17A

ACCTTTTGCC AAGCTGTGGG CATCGTGTGT GAGTACAGGG TGCTCAGCTC 3950
TTCCACCGTC ATTTTGAATT GTTCACATGG GTAATTGGTC ATGGAAATGA 4000
TCAGATTGAC CTTGATTGAC TGTCAAGGCAT GGCCTTGTCT CTAGTTTCAA 4050
TCTGTTCTCG TTCCCTTGAC CGGATTATC TACTCCTGCA ATGAACCCCTG 4100
TTGACACCGG ATTTAGCTCT TGTCGGCCTT CGTGGGGAGC TGTTTGTGTT 4150
AATATGAGCT ACTGCATGTA ATTCTTAAAC TGGGCTTGTC ACATTGTATT 4200
GTAATTTTGT GATCTGTAAT GAAAGAATC TGTA CTGCAA GTAAAACCTA 4250
CTCCCCAAA ATGTGTGGCT TTGGGTCTGC ATTAACCGCT GTAGTCCATG 4300
TTCATGCC 4308

FIGURE 17B

MDMGNQHPISRLQEIQKEVKSVEQQVIGFSGLSDDKNYK KLERILTKQL 50
FEIDSVDTEG KGDICQARKRAAQETERLLK ELEQNANHPH RIEIQNIFEE 100
AQSLVREKIV PFYNGGNCVT DEFEEGIQDI ILRLTHVKTG GKISLRKARY 150
HTLTKICAVQ EIIEDCMKKQ PSLPLSEDAH PSVAKINFVM CEVNKARGVL 200
IALLMGVNNN ETCRHLSCVL SGLIADLDAL DVCGRTEIRN YRREVVEDIN 250
KLLKYLDLEE EADTTKAFDL RQNHSLKIE KVLKRMREIK NELLOAQNPS 300
ELYLSSKTEL QGLIGQLDEV SLEKNPCIRE ARRAVIEVQ TLITYIDLKE 350
ALEKRKLFAC EEHPSHKAWW NVLGNLSEIQ GEVLSFDGNR TDKNYIRLEE 400
LLTKQLLALD AVDPQGEEKC KAARKQAVRL AQNILSYLDL KSDEWEY 447

[illegible]

FIGURE 18

